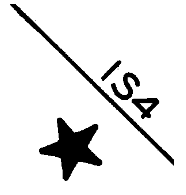




1S4

POWER AMPLIFIER PENTODE

MINIATURE TYPE

Filament	Coated	
Voltage	1.4	d-c volts
Current	0.1	amp.
Maximum Overall Length		2-1/8"
Maximum Seated Height		1-7/8"
Maximum Diameter		3/4"
Bulb		T-5-1/2
Base△		Miniature Button 7-Pin
Pin 1 - Filament -		Pin 5 - Filament -
Pin 2 - Plate		Pin 6 - Plate
Pin 3 - Grid		Pin 7 - Filament +
Pin 4 - Screen		
Mounting Position	BOTTOM VIEW (7AV)	Any

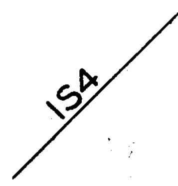
AMPLIFIER

Plate Voltage	90 max.	volts
Screen Voltage	67.5 max.	volts
Total Max.-Signal Cathode Current	11 max.	ma.
Total Zero-Signal Cathode Current	9 max.	ma.

Typical Operation and Characteristics - Class A_1 Amplifier:

Filament	1.4	1.4	1.4	d-c volts
Plate	45	67.5	90	volts
Screen	45	67.5	67.5	volts
Grid	-4.5	-7	-7	volts
Peak A-F Grid Voltage	4.5	7	7	volts
Zero-Signal Plate Cur.	3.8	7.2	7.4	ma.
Zero-Signal Screen Cur.	0.8	1.5	1.4	ma.
Plate Res. (Approx.)	0.1	0.1	0.1	megohm
Transcond.	1250	1550	1575	µmhos
Load Res.	8000	5000	8000	ohms
Total Harmonic Distortion	12	10	12	%
Max.-Sig. Power Output	65	180	270	mw

△ *The center hole in sockets designed for this base provides for the possibility that this tube type may be manufactured with the exhaust-tube tip at the base end. For this reason, it is recommended that in equipment employing this tube type, no material be permitted to obstruct the socket hole.*





1S4



AVERAGE PLATE CHARACTERISTICS

E_f = 1.4 VOLTS D.C. SCREEN VOLTS = 67.5

CONTROL-GRID VOLTS E_{c1}=0

-2 -4 -6 -7 -8 E_{c1}=-10 -12 -14

E_{c1}=0 I_b I_{c2}

PLATE VOLTS: 0 25 50 75 100 125 150 175 200

PLATE (I_b) OR SCREEN (I_{c2}) MILLIAMPERES: 20 15 10 5 0

JAN. 26, 1942

RCA RADIOTRON DIVISION
RCA MANUFACTURING COMPANY, INC.

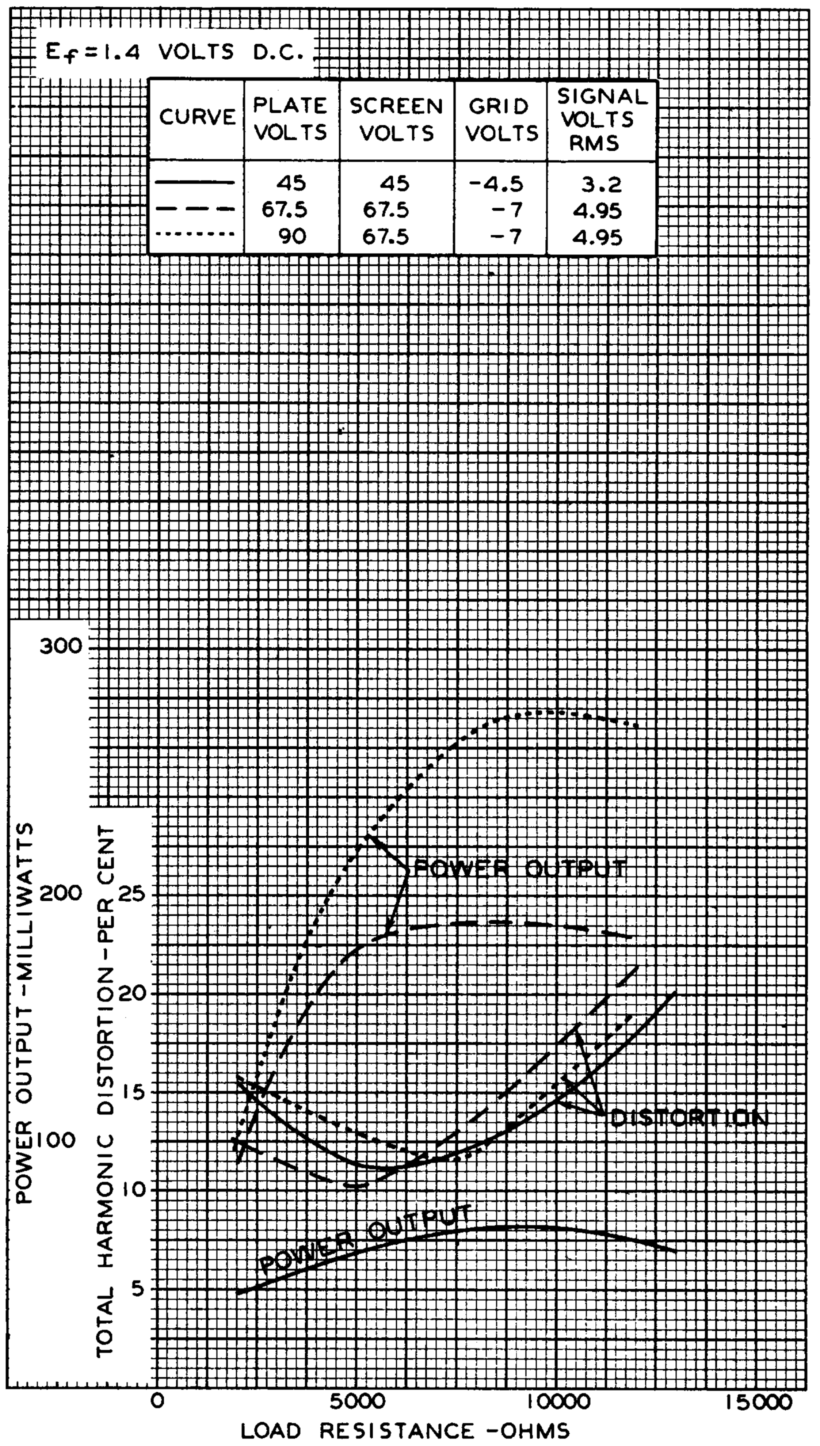
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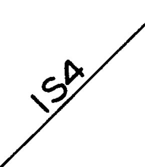


1S4

OPERATION CHARACTERISTICS



MAY 8,1941 | RCA RADIOTRON DIVISION, RCA MANUFACTURING COMPANY, INC. | 92C-6175R1





1S4

AVERAGE PLATE CHARACTERISTICS

TRIODE CONNECTION

E_f = 1.4 VOLTS

GRID VOLTS E_c = 0

E_c = −20

−25, −15, −10, −5, +5

I_c — E_c = +5

PLATE VOLTS: 0, 25, 50, 75, 100, 125

PLATE (I_b) OR GRID (I_c) MILLIAMPERES: 16, 12, 8, 4, 0

DEC. 26, 1941

RCA RADIOTRON DIVISION
RCA MANUFACTURING COMPANY, INC.

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